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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,773	12/02/2003	Yinjun Zhu	20-526	1919
<div>7590 02/22/2008 MANELLI DENISON & SELTER PLLC 7th Floor 2000 M Street, N.W. Washington, DC 20036-3307</div>			<div>EXAMINER NGUYEN, DAVID Q</div>	
			<div>ART UNIT 2617</div>	<div>PAPER NUMBER</div>
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/724,773

Applicant(s)

ZHU, YINJUN

Examiner

David Q. Nguyen

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicants argue: "This is fine for Control Plane based location services, but it is not valid assumption for User Plane based location services".

In response to applicant's arguments, the recitation "User Plane based location service" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Applicants also argue: "Thus, Havinis's invention is directed toward a new LCS transaction type not disclosed as having any application to a wireless device while it is roaming, much less establishing a roaming interface between a wireless device and a visited location service (V-LCS) manager, much less via an intermediary home location Service (H-LCS) manager, as recited by claims 1-15"

Examiner disagrees. Havinis discloses on col. 5, line 62 to col. 6, line 26: "The originating BSC 23 then determines which Base Transceiver Station (BTS) 24a is currently serving the MS 20, and obtains a Timing Advance (TA) value (TA1), or other positioning data, from this serving BTS 24a, if possible. TA values corresponds to the amount of time in advance that the MS 20 must send a message in order for the BTS 24a to receive it in the time slot allocated to that MS 20. When a message is sent from the MS 20 to the BTS 24a, there is a

propagation delay, which depends upon the distance between the MS 20 and the BTS 24a. TA values are expressed in bit periods, and can range from 0 to 63, with each bit period corresponding to approximately 550 meters between the MS 20 and the BTS 24a.

Thereafter, TA values are obtained from at least two target BTSs (24b and 24c) (step 555) by performing a positioning handover. If the serving BTS 24a does not support positioning, an additional target BTS (not shown) must be selected. It should be noted that positioning of the MS 20 can be performed using more than three BTSs (24a, 24b, and 24c).

The TA values (TA1, TA2 and TA3) measured by the BTS's (24a, 24b and 24c) are then transmitted by the serving BSC 23 to the SGSN 30 (step 560). Finally, the TA values (TA1, TA2 and TA3) and the positioning request 285 are forwarded to a serving Mobile Location Center (MLC) 270 from the SGSN 30 (step 565), where the location of the MS 20 is determined using a triangulation algorithm (step 570). The MLC 270 then presents positioning information 275 representing the geographical position of the MS 20 to the requesting LA (node) 280 (step 575) without interrupting the data call connection between the positioned MS 20 and the Internet 260".

It is clearly that Havinis discloses establishing a roaming interface between a wireless device and a visited location service (V-LCS) manager, via an intermediary home location Service (H-LCS) manager as recited by claims 1-15.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Havinis (US 6,219,557) in view of Lam et al. (US 2003/0072318).

Regarding claims 1 and 6, Havinis teaches a method and apparatus for providing a User Plane location based service to a roaming wireless device, comprising: establishing a roaming interface between a wireless device (see figs 4-5 and their descriptions; wireless phone, element 20) and a visited location service manager (see figs 4-5 and their descriptions; GMLC, element 290) via an intermediary home Location Services manager (see figs 4-5 and their descriptions; HLR, element 26) associated with said wireless device(see figs 4-5 and their descriptions); and directing IP connectivity over said roaming interface between said home LCS manager and said visited LCS manager (see col. 2, lines 3 to 4, describing a data call, which is through an internet connection); whereby providing a message tunneling mechanism is formed to provide an uninterrupted communication path between a visited location service (V-LCS) manager system and said wireless device being located (see col. 5, lines 7-54). Havinis does not teach directing IP connectivity over the internet capable of being transmitting through a firewall in a home wireless carrier network and through a firewall in a visited wireless carrier network. However, Lam et al teach that firewalls are well known in the art, are used as filtering devices to protect networks from unauthorized access, and may be placed in various locations within networks (see par. 24).

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In addition, Lam teaches that it is well known to use firewalls between home carrier networks and visited carrier networks, as shown for example in fig. 1, in which a firewall is shown in use with SGSN and a GGSN. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify Havinis to include firewalls between the home and visitor carrier networks in order to protect each network from unauthorized access as taught by Lam (see par. 0024).

Regarding claim 11, Havinis teaches a method of providing a User Plane location based service to a roaming wireless device, comprising: establishing a roaming interface between a wireless device (see figs 4-5 and their descriptions; wireless phone, element 20) and a visited location service manager (see figs 4-5 and their descriptions; MLC, element 270) via an intermediary home Location Services manager (see figs 4-5 and their descriptions; GMLC, element 290) associated with said wireless device(see figs 4-5 and their descriptions); and directing IP connectivity over said roaming interface between said home LCS manager and said visited LCS manager (see col. 2, lines 3 to 4, describing a data call, which is through an internet connection); whereby providing a message tunneling mechanism is formed between a visited location service (V-LCS) manager system and said wireless device being located (see col. 5, lines 7-54 and fig. 5). Havinis does not teach directing IP connectivity over the internet capable of being transmitting through a firewall in a home wireless carrier network and through a firewall in a visited wireless carrier network. However, Lam et al teach that firewalls are well known in the art, are used as filtering devices to protect networks from unauthorized access, and may be placed in various locations within networks (see par. 24). In addition, Lam teaches that it is well known to use firewalls between home carrier networks and visited carrier networks, as

shown for example in fig. 1, in which a firewall is shown in use with SGSN and a GGSN.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify Havinis to include firewalls between the home and visitor carrier networks in order to protect each network from unauthorized access as taught by Lam (see par. 0024).

Regarding claims 2-5, 7-10 and 12-15, Havinis in view of Lam et al teaches all the steps/elements of claims 2-5 and 7-10, including the roaming wireless device being a mobile telephone, a PDA, a wireless email device, or a wireless device including a camera (see Havinis, col. 1, lines 38-43; and Lam et al. par. 16).

Conclusion

3. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Q. Nguyen whose telephone number is 571-272-7844. The examiner can normally be reached on 8:30AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOSEPH H. FEILD can be reached on (571)272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



David Q Nguyen
Examiner
Art Unit 2617